(12) UK Patent Application (19) GB (11) 2 264 436 (13) A

(43) Date of A publication 01.09.1993

(21) Application No 9301409.0

(22) Date of filing 25.01.1993

(30) Priority data

(31) 9204023

(32) 25.02.1992

(33) GB

(71) Applicants

Barry George Amey 5 Greenways, London Road, Addington, Kent, ME19 5AN, United Kingdom

Peter Edward Davis

Lower Westwood House, Stretton Westwood, Much Wenlock, Shrops, TF13 6DL, United Kingdom

(72) Inventors

Barry George Amey

Peter Edward Davis

(74) Agent and/or Address for Service

Stevens, Hewlett & Perkins

1 Serjeant's Inn, Fleet Street, London, EC4Y 1LL,

United Kingdom

(51) INT CL5 G09F 13/20, A47B 95/02

(52) UK CL (Edition L)

A4L LDD LU11A LU11D LU12

(56) Documents cited

GB 2250636 A GB 2146475 A WO 86/00659 A

DE 000412067 A1 US 4981314 A

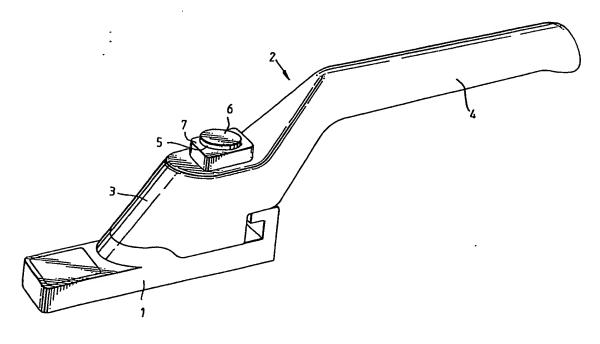
(58) Field of search

UK CL (Edition L) A4L LDD INT CL5 A47B 95/02, G09F 13/20 13/42

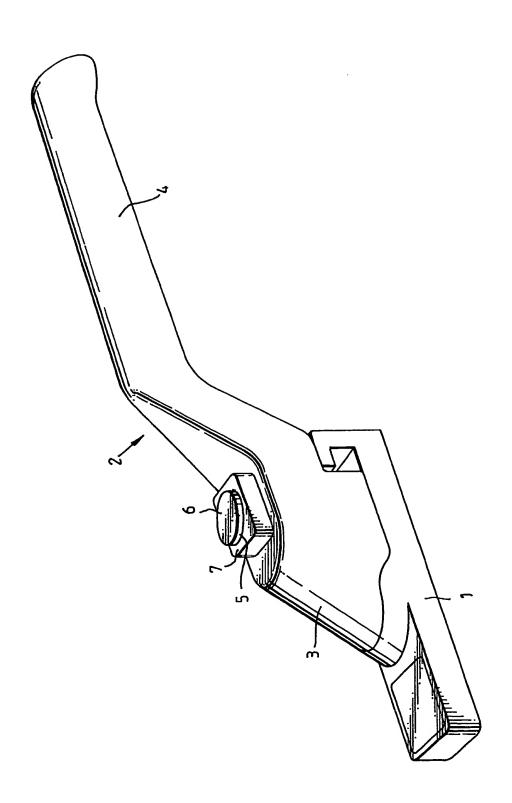
Online databases: WPI

(54) Luminescent door handles

(57) A door or window handle comprising a handle part 2 which is rotatable with respect to a base part 1 in order to operate an associated lock or latch mechanism (not shown). Mounted within the handle part 2 is a latching mechanism operated by a push button 5. In order to aid visibility of the push button 5, and thus enable the handle to be used in the dark, or in an emergency, the visible surface 6 of the button is formed or covered or coated with a luminous material.



3B 2 264 436 A



"DOOR OR WINDOW HANDLES"

This invention relates to handles for doors or windows.

A problem arises with such handles in the event of a fire. The occupant of a room within a building which is on fire clearly wishes to escape from the room as quickly as possible and he or she thus makes for the nearest door or window, as appropriate. When the room is in darkness and/or is filled with smoke, the occupant may find it difficult to find the handle and, particularly if in panic, may waste precious time trying to locate the handle.

In the present invention, this problem is addressed by providing, on at least one visible surface of the handle a luminous material so that the handle is visible even in such difficult conditions as described above. The luminous material may be provided as a layer of luminous material attached to the aforesaid surface or as a coating of luminous paint on the surface. Alternatively that part of the handle itself which forms said surface may be made of luminous material.

15

20

25

30

35

The luminous material may be provided in the form of a pattern, possibly creating letters or a word indicating an escape route. The luminous material may be provided on the turnable part of the handle or, where the handle incorporates a lock, or a latching button, lever or similar means, may be placed on or about the lock or latch operating means so as to clearly indicate its location. Locking or latching mechanisms are now routinely provided on window handles for security purposes; locking mechanisms requiring a key are generally looked upon with disfavour by fire authorities since, even if the occupant locates the handle, they may still not be

able to escape if the key is not present. Therefore non-lockable latching mechanisms are preferred.

In an embodiment of the invention, a part of the same surface, or a different visible surface, of the handle is provided with a reflective surface. The reflective surface may be provided close to the luminous surface, in order to enhance its effectiveness, or may be separate therefrom. The primary purpose of the reflective surface is to enable the handle to be readily located by shining a light on it. Many people have a torch by their bedside which could be used for such purpose.

5

10

15

35

In order that the invention may be better understood, an embodiment thereof will now be described by way of example only and with reference to the accompanying drawing which is a perspective view of an espagnolette window handle made in accordance with the invention.

Referring to the drawing, the handle comprises a baseplate 1 which is screwed to the openable part of 20 the window (not shown) and a handle part 2 which is rotatable with respect to the baseplate 1 to engage or otherwise a formation (not shown) attached to the The handle part 2 comprises a main window frame. body 3 and a grippable portion 4. Within the main 25 body 3 is a latching mechanism which is operated by an external button 5. Generally speaking, the button will be in its up (latched) position in both extreme positions of the handle, but other arrangements are possible. In order to operate the handle to open the 30 window, the button is depressed to release the latching mechanism and thus free the handle part 2 for rotation about the baseplate 1.

In order to be clearly visible in a darkened and/or smoke-filled room, the button 5 needs to be clearly seen. To this end, the visible surface 6 of

the button is formed, or covered or coated with, a luminous material. The luminous material will emit light that has been stored during daylight hours, or when exposed to a normal room light for any length of time.

Surrounding the button is a collar 7 made of reflective material which will enhance the effect of the luminous material and at the same time provide a reflective surface which will shine when a light from a light source such as a torch is incident upon it.

The luminous and reflective surfaces may alternatively or in addition be applied to other visible surfaces, such as the handle part 4 or even the baseplate 1. In the event that a key operated lock takes the place of the button 5, the visible surface of such lock may be provided with a luminous coating.

Although described in relation to a window handle, it is clear that the principles of the invention could be readily applied to door handles, including sliding door handles, as well as to other types of window handle, whether lockable or not.

25

5

10

15

20

30

CLAIMS

- 1. A door or window handle comprising a base part for attachment to the door or window and a handle part rotatably mounted on said base part for operation of an associated lock or latch mechanism, said handle being characterised in that, on at least one visible surface of the handle, there is provided a luminous material.
- 10 2. A handle as claimed in claim 1 wherein the luminous material is provided as a layer of luminous material attached to said surface.

15

- 3. A handle as claimed in claim 1 wherein the luminous material is provided as a coating of luminous paint on said surface.
- 4. A handle as claimed in claim 1 wherein that part of the handle which comprises said surface is made of luminous material.
- 5. A handle as claimed in any one of claims 1 to 20 4 wherein the luminous material is provided on the handle part of said handle.
 - 6. A handle as claimed in any one of the preceding claims further comprising a locking or latching means, and operating means for operating said
- 25 locking or latching means, and wherein the luminous material is provided on a visible surface of said operating means.
- A handle as claimed in any one of the preceding claims wherein said luminous material is
 provided in the form of a pattern.
 - 8. A handle as claimed in claim 7 wherein said pattern takes the form of letters or words.
 - 9. A handle as claimed in any one of the preceding claims wherein a part of said surface,
- 35 and/or a different surface is provided with reflective material.

10. A door or window handle substantially as hereinbefore described with reference to and as illustrated in the accompanying drawing.

Patents Act 1977 Examiner's report to the Comptroller under Section 17 (The Search Report)

Application number

Relevant Technical fields	Search Examiner
(i) UK CI (Edition L) A4L (LDD)	
(ii) Int CI (Edition ⁵) A47B 95/02; G09F 13/20 - 13/42	MR A ANGELE
Databases (see over) (i) UK Patent Office	Date of Search
(ii) WPI	11 MAY 1993

Documents considered relevant following a search in respect of claims

Relevant to claim(s)	ument and relevant passages	Identity of docum	Category (see over)
1 to 9	(TRANTER) - see whole document - especially embodiments of Figures 2 to 4	GB 2250636 A	x
1,2,4,5	(SHEFFIELD BRICK) - whole document	GB 2146475 A	x
1, 4	(GKN-STENMAN) - see page 6 and Figure 5 embodiment	WO 86/00659	x
1 to 7,	(CARR) - see especially column 2 paragraph 1, column 4 paragraph 1	US 4981314	х
9	1 (VOLKSWAGEN) - whole document	DE 4120677 A1	x
·			

Category	Identity of document and relevant passages	Relevant to claim(s
	•	
	•	

Categories of documents

- X: Document indicating lack of novelty or of inventive step.
- Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.
- A: Document indicating technological background and/or state of the art.
- P: Document published on or after the declared priority date but before the filing date of the present application.
- E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.
- &: Member of the same patent family, corresponding document.

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).